

NOAA Ship RONALD H. BROWN



and the only one in the U.S. research fleet that provides scientists with a valuable tool for studying the formation and composition of complex weather systems at sea.

Ronald H. Brown's maneuvering capabilities, provided by a dynamic positioning system, enhance the ship's station-keeping abilities. This automated control of the stern and bow thrusters enables the vessel to hold station within a 300-ft. radius in seas up to 11 feet, a wind speed of 27 knots and a 2-knot current. This capability is critical when deploying and recovering deep-sea moorings, supporting remotely operated vehicles and deploying over-the-side sensors.

During the ship's recently completed year-long around-the-world research cruise, the ship and its crew participated in seven major projects, supported more than 250 scientists from 50 institutions, and traveled more than 55,000 nautical miles. As a collective group, these projects studied the natural and man-made forces that drive global climate variability. Important questions about the El Niño/La Niña phenomena, air pollution effects on temperature, monsoon rain effects and early tsunami prediction were among the many being answered by scientists aboard the ship.

The ship is named in honor of the late Secretary of Commerce Ronald H. Brown, who was killed in an aircraft crash while on an economic mission to Croatia. His widow christened the ship and participated in the ship's commissioning ceremony.

NOAA Ship *Ronald H. Brown*, homeported in Charleston, South Carolina, is the newest research vessel in the NOAA fleet. It is an AGOR-24 class ship constructed under a NOAA-Navy Memorandum of Agreement. The ship is a multipurpose research vessel capable of supporting physical, chemical and biological oceanography; atmospheric and climate research; marine acoustics; marine geology and geophysics; bathymetry; and a host of multidisciplinary environmental investigations in coastal and deep ocean regions. Although primarily deployed in support of NOAA's Office of Oceanic and Atmospheric Research, the ship also supports a wide range of academic research institutions.

As one of the Nation's most technologically advanced research vessels, *Ronald H. Brown* is equipped to support a wide range of programs. Five primary laboratories provide nearly 4,000 square feet of dedicated mission space, with additional space on deck to support up to nine laboratory vans. The ship is equipped with a suite of scientific sensors, including a multibeam mapping system, sub-bottom profiler, acoustic Doppler current profiler, acoustic positioning system, and C-band Doppler radar. *Ronald H. Brown's* Doppler radar Cone is one of the few ship-supported systems of its kind in the world,



Deck crew retrieves an acoustic cable



Preparing to deploy an ASIS buoy

Ship Specifications

Length (LOA): 274 ft.
Breadth: 52.5 ft.
Draft: 17 ft.
Displacement: 3,250 tons
Cruising Speed: 12 knots
Range: 11,300 nm
Endurance: 60 days
Hull Number: R104
Call Letters: WTEC
Commissioned Officers: 5
Licensed Engineers: 4
Crew: 16
Scientists: 34 (Max)
Launched: May 30, 1996
Delivered: April 18, 1997
Commissioned: July 19, 1997
Builder: Halter Marine,
Moss Point, Mississippi
Designer: Halter Marine



Scientists and divers prepare to disconnect TAO buoy prior to bringing it aboard ship



A new buoy is deployed

NOAA Marine and Aviation Operations

Since NOAA's beginning, NOAA ships and aircraft have played a critical role in the collection of its oceanographic, atmospheric, hydrographic, fisheries and coastal data. This fleet of platforms is managed and operated by NOAA Marine and Aviation Operations (NMAO), an office made up of civilians and officers of the NOAA Commissioned Corps, the Nation's seventh service. In addition to research and monitoring activities critical to NOAA's mission, NOAA ships and aircraft provide immediate response capabilities for unpredictable events. Most recently, NOAA aircraft provided support to the World Trade Center and Pentagon recovery and clean-up efforts by mapping the wreckage using remote-sensing technology. NOAA survey ships found the wreckage of EgyptAir Flight 990, TWA Flight 800 and John F. Kennedy Jr.'s aircraft. Our ships, aircraft and personnel have also conducted damage assessments after hurricanes and major oil spills such as the *Exxon Valdez*, Persian Gulf War and *New Carissa*.

NOAA's fleet of research and survey ships is the largest fleet of federal research ships in the Nation. The fleet ranges from large oceanographic research vessels capable of exploring the world's deepest ocean, to smaller ships responsible for charting the shallow bays and inlets of the United States. The fleet supports a wide range of marine activities, including fisheries research, nautical charting and mapping, and ocean and climate studies. Many of NOAA's research vessels are unique in their ability to conduct scientific research.

NOAA's fleet of fixed-wing aircraft and helicopters operate throughout the world, providing a wide range of capabilities, including hurricane prediction research, marine mammal and fisheries assessment, and coastal mapping. NOAA aircraft are modified to carry scientists and specialized instrument packages to conduct research for NOAA's missions.

NOAA Commissioned Officer Corps

The NOAA Corps is one of the seven uniformed services of the United States, composed of commissioned officers who provide NOAA with an important blend of operational, management, and technical skills that support the agency's science and surveying programs at sea, in the air, and ashore. NOAA Corps officers, in addition to managing and operating ships and aircraft, are also scientists and engineers. Corps officers serve in NOAA's research laboratories and program offices throughout the Nation and in remote locations around the world; for example, an officer serves as station chief at the South Pole, Antarctica.

ABOUT NOAA

NOAA conducts research and gathers data about the global oceans, atmosphere, space, and sun, and applies this knowledge to science and service that touch the lives of all Americans.

NOAA warns of dangerous weather, charts our seas and skies, guides our use and protection of ocean and coastal resources, and conducts research to improve our understanding and stewardship of the environment which sustains us all.

A Commerce Department agency, NOAA provides these services through five major divisions: the National Weather Service, the National Ocean Service, the National Marine Fisheries Service, the National Environmental Satellite, Data and Information Service, and Office of Oceanic and Atmospheric Research; and numerous special program offices. More information about NOAA can be found at <http://www.noaa.gov>

Visit the ship's web site at www.moc.noaa.gov/rb/
For more information, contact NMAO at 301-713-1045
or visit our web site at www.nmao.noaa.gov

